Agropop Policy Brief

Food Standards are good -- for middle class farmers

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AGROPOP – POLICY BRIEF

Food Standards Are Good – For Middle Class Farmers

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THE MEKONG RIVER DELTA is an example of industrialization via strategic coupling between global production networks and resource-rich regions. Especially the region's rice and seafood industries have experienced remarkable growth due to the link with global markets.

Food safety and quality standards are widely integrated both at the production and processing levels. The ability to upgrade in order to serve more profitable markets is a key component in the export boom.

To participate in global production networks local producers must fulfill requirements of food quality and safety regulation of the distant destination markets. Typically, it is not sufficient to comply with the public regulation in the destination countries as foreign market access depends on the ability of exporters to follow private or voluntary food standards. Introduction of voluntary standards in a particular agri-food sector is associated with high compliance costs for farmers and this may marginalize the poorest.

In analysing the direct impact of food standards on farmers' livelihoods, the literature has focused on average impacts. While the average gain from standards is interesting, there is a case for believing that the gain is unevenly distributed across households of different socio-economic status. We therefore analyse the distributional impact of food standards on consumption expenditure using an original dataset from the Vietnamese pangasius value chain. We find that applying food standards leads to an average increase in monthly consumption expenditure of about 50% for each household member. Moving beyond averages, we find very small effects for the poorest half of the farmers while there are large positive effects for the upper middle-class. The gain for the upper middle-class is an increase in consumption expenditure of around 65%. While the small impact of standards on the poorest half of the farmers is clearly the main result, an equally trivial gain from adopting standards for the 10–15% wealthiest farmers is also interesting.

The distribution of the effect of adoption of standards is an outcome of two different conditions: (i) for the poorest farmers there is no gain because of the high costs of financing the investment, while (ii) for the wealthiest farmers there is no gain because they are already able to get high prices on their fish, partly because they produce fish of high quality and partly because they have good working relations with the processors. The overall outcome is that application of food standards in the Vietnamese catfish sector is benefitting the upper middle-class directly, while the benefits for the poorer segment are either absent or, at best, second order labour market effects.

AGROPOP – Agricultural Growth and Poverty Pockets

AGROPOP is a Danida funded research project led by Professor Henrik Hansen (Department of Economics) in collaboration with Professor Niels Fold (Department of Geosciences and Natural Management), Dr. Mai Van Nam and Dr. Vo Thanh Danh from the School of Economics and Business Administration, Can Tho University, Vietnam.

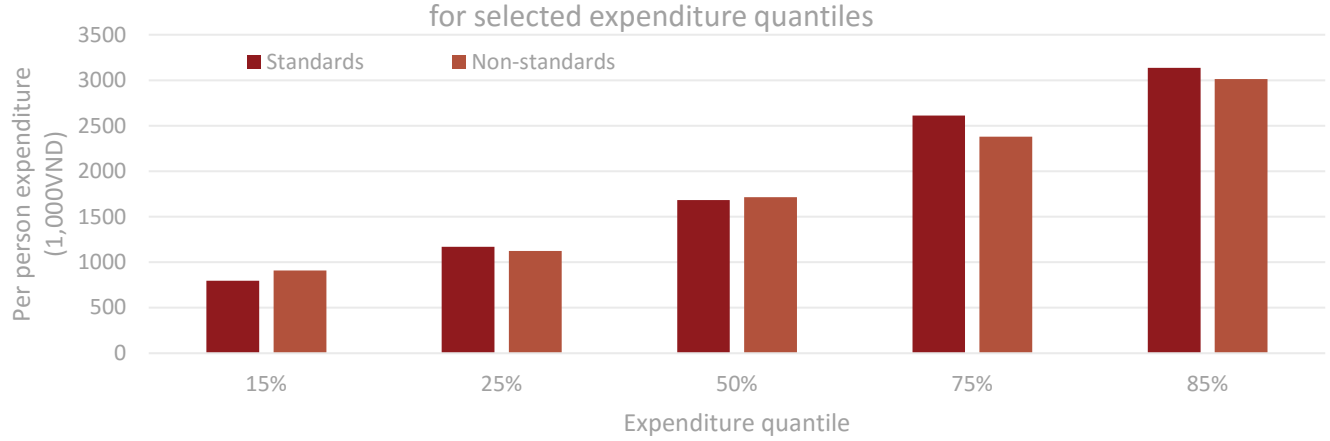
The overall objective of the project is to provide a better understanding of the processes that create and shape geographically concentrated areas of poverty in regions marked by agricultural growth and diversification.

The main result of the project is a better understanding of the ways in which global influence materialize in the regional distribution of value. The distribution essentially relies on local processes of negotiation, on the entrepreneurship of individuals, and on the willingness and ability of farmers and workers to internalize new values as exemplified in this policy brief

The project has educated two PhD candidates at University of Copenhagen and four PhD candidates at Can Tho University in Vietnam.

Project web-page:
http://www.econ.ku.dk/derg/activities/agropop-project/

Figure 1:
Expenditure levels for adopters and non-adopters of food standards for selected expenditure quantiles



Background

The economic literature suggests that the effects of food standards on smallholder producers from developing countries are ambiguous.

Food standards can improve the financial position of farmers who succeed in complying with the standards. After the initial investments, standards can bring positive financial returns to farmers as they improve access to new markets, quality, and safety product attributes and competitiveness.

However, an important concern is that food standards contribute to exclusion of the poorest farmers who fail to comply with strict requirements because of their weak managerial and capital endowments. The costs of implementing standards at the farm level vary across individual farmers, products, sectors, and geographical location, as conditioned by economies of scale or location-specific factors. Further, non-compliance with standards is linked with exclusion of farmers from high-value export sectors and higher inequality in several studies.

Previous studies of the impact of food standards on rural households have mainly focussed on average effects, thus they have not identified the exact wealth interval at which standards becomes beneficial for the producers. We present new empirical evidence of the distributional effects.

The pangasius sector in Vietnam

Ensuring satisfactory product quality and safety requires close monitoring of activities during primary production and processing. Two approaches of retailers and international traders can be observed in this regard. The first approach is seen with retailers and traders who have developed their own internal standards and certification schemes, which include visits at production and processing sites and quality inspection of products. The second approach is seen with retailers who require that producers and processors obtain internationally recognized certificates through systems such as GlobalGAP, BAP, or BRC. In this case, certification substitutes for the active involvement of retailers in production and distribution monitoring.

Standards such as GlobalGAP and BAP have primacy at the farm-level of the pangasius value chain. GlobalGAP is presently the leading certification system in continental Europe, while retail chains in the United States, Canada, and United Kingdom favor BAP certification. In Vietnam, some 45% of the pangasius farming area (2,805 ha) is certified. There are currently 49 enterprises with GlobalGAP certification, while 103 farms have been, or are being, certified by different sustainability standards. Two pangasius processing plants, one farm and one feed supplier are BAP certified.

In the pangasius value chain the process of exchange starts by the orders received from buyers, primarily foreign retailers, who communicate their purchase specifications to international traders, wholesalers, or directly to processing companies. In fulfilling orders, processors opt for sourcing from own farms (estate farms) or from contract farms. Alternatively, farmers inform processors that they have a particular quantity of fish to sell. Production on estate farms allows for the greatest degree of control over production methods. By sourcing the fish from multiple parties, processing companies can supply a range of qualities and prices, while ensuring an ability to flexibly respond to changes in demand over time.

As sales of pangasius to processing companies are not conditioned by compliance with standards, both spot-market purchases from independent farmers and contract production involve product testing for quality and safety verification. Technicians employed by processing companies check the quality and safety of unprocessed fish at the farm and based on the inspection results the company decides whether to complete the purchase. The quality inspections consist of size and flesh color checks, while the safety inspections include tests for the presence of antibiotic residues and fish diseases. At this point, the farm gate price is determined, reflecting the overall quality parameters of fish. The fish is tested again at the point of delivery to the processing plant. Just after the processing and before they are shipped abroad, products are inspected by the authorities. In case a processing company sells to any of the retail chains it is customary for retailers to pay visits to processing facilities and farms to inspect not only the final product but also the production process. Guided by commercial concerns about their marketing image, retailers are found to be regulating the nature of processes upstream in the value chain.

Quantifying gains from food standards in pangasius farming

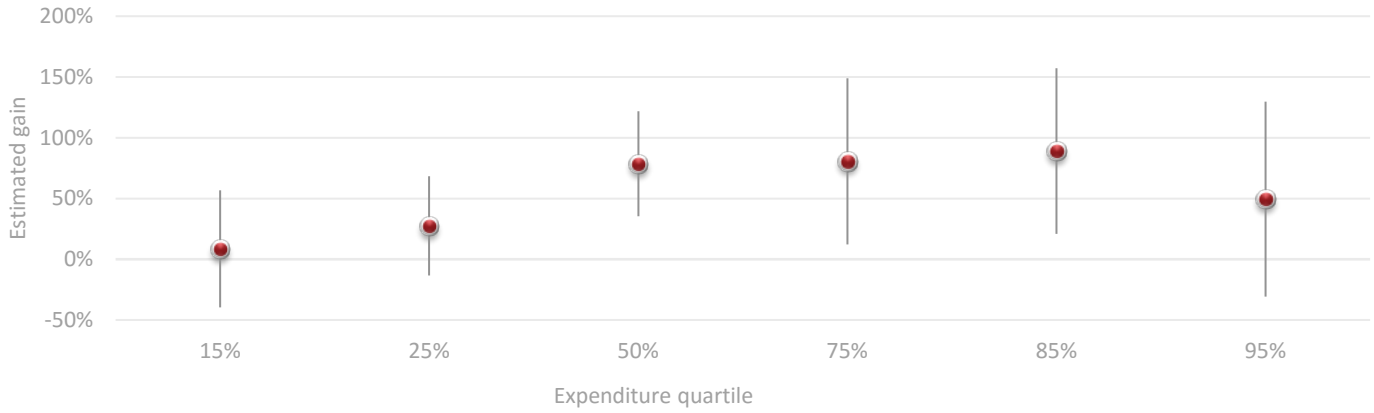
In assessing the gains from food standards in pangasius farming in the Mekong River Delta, we use qualitative interviews, a farmer survey, field observations, and published secondary material.

Our interviews included 52 informants with knowledge of the pangasius industry. The support from local research institutions and the provincial Ministry of Agriculture and Rural Development (MARD) offices was crucial for reaching farmers and processing companies. The farmer survey took place from April to June 2011 in three provinces in the Mekong River Delta that have a high intensity of pangasius production. The survey included 276 farmers.

Results

Using the farmer survey we compute distributions of expenditure levels (per household member) for pangasius farmers who adopt, and

Figure 2:
Estimated relative gain from adopting food standards
with 95 percent confidence bands



farmers who do not adopt, food standards. We find that the poorest farmers in both groups, have very similar expenditure levels (Figure 1) while the better off farmers (the top 15 percent) have about 7 per cent higher expenditure levels when they adopt the food standards.

The figure does not prove that applying standards, or not, have no impact on expenditures or that it only affects expenditures for the better-off. Therefore, we test statistically the impact of applying standards on consumption expenditure. Our statistical analysis indicates that the gain from standards is an increase in consumption expenditure of more than 50% for the upper middle class while there is no systematic gain for the poorest or the richest (Figure 2).

To supplement the statistical results, we use information on the motivation of farmers to start applying standards across quantiles. All groups of farmers stated that the main reason for applying standards is to improve product quality. But farmers in the top quantile are the only group stating that they do not expect to reduce the occurrence of fish diseases with the application of standards. This reaffirms our point that these farmers are probably better able to manage production of catfish. However, there is an upper bound to which the increase in quality is reflected in price and the application of standards ceases to have effect. Indeed, farmers who apply standards in the top quantile do not receive much higher price compared to the non-appliers.

For the poorer farmers, the small and insignificant impact of standards on consumption expenditure must have another explanation. One possibility could be that poorer farmers may have difficulty in inferring returns from the new technology, or they may face specific constraints, such as restrictions in the capital market, which prevent adoption. The farmers in our sample have most frequently stated that too high costs of implementation and lack of competences are the key inhibiting factors for the implementation of standards. This lends support to both explanations.

Conclusion

Our results show that the additional effort in terms of modified production practices and use of improved inputs pays off for the applicants of food standards as we find a positive overall impact of standards on farmers' wellbeing. Thus, on average, one should expect pangasius farms that apply standards to be better off than comparable farms with traditional production. This suggests not only that investment in food standards is necessary in modern value chains, but also that this investment can lead to subsequent financial gains. However, we find that only households at higher levels in the expenditure distribution who have opted for the application of food standards get significant benefits.

Implications

Adoption of food standards can be a strategic instrument in rural sector development, but care needs to be directed toward small-scale farmers, probably through financial and technical assistance. In case of the Vietnamese pangasius farmers, better credit options and training are most likely desirable, together with organizational and business development training.

Group certification of small farmers has been a solution to the high cost of certification in other countries but such an option needs to be evaluated against cultural, social, and political conditions in Vietnam.

References

Henrik Hansen and Neda Trifković, Food Standards are Good – For Middle-Class Farmers, *World Development*, Volume 56, April 2014, Pages 226-242, ISSN 0305-750X.

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